MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

GAF
1 Campus Drive
Parsippany, NJ 07054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF EverGuard® Freedom™ TPO HW, EverGuard Extreme® Freedom™ TPO HW and EverGuard® Freedom™ TPO with RapidSeam™ Technology Single Ply Roofing Systems over Concrete Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 14-0403.04 and consists of pages 1 through 22.
The submitted documentation was reviewed by Jorge L. Acebo.

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply Roofing
Material: TPO
Deck Type: Concrete
Maximum Design Pressure: -347.5 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® Freedom™ TPO with RapidSeam™ Technology	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with self-adhering laps.
EverGuard® Freedom™ TPO HW	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with a heat weldable seam.
EverGuard Extreme® Freedom™ TPO HW	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with a heat weldable seam designed for advanced protection against heat aging and UV degradation.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated coated glass mat base sheet.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated coated glass mat base sheet.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated coated glass mat base sheet.
UnderRoof™ 2 Polyester-Surfaced Leak Barrier	39 ⅜" x 67.8' rolls	ASTM D 1970	Self-adhering reinforced membrane of SBS modified asphalt with polyester surfacing for use as a leak barrier underlayment or vapor retarder.
EverGuard® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing.

Product	Dimensions	Test Specification	Product Description
EverGuard Extreme® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing and designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Cover Tape	6" x 100′ 10" x 100′	Proprietary	GAF TPO laminated to white butyl tape primarily used for edge metal details.
EverGuard® TPO Cover Tape Heat-Weld	6" x 100′	Proprietary	Manufactured from un-reinforced GAF TPO laminated to a six inch wide tape with a 3 inch self-adhered area and a 3 inch heat-weldable edge; used for edge metal details.
EverGuard Extreme® TPO Cover Tape Heat-Weld	6" x 100′	Proprietary	Manufactured from reinforced GAF TPO designed for advanced protect against heat aging and UV degradation. Laminated to a six inch wide strip, half the strip with a self-adhered side and half the strip with a heat-weldable edge; used for edge metal details.
EverGuard® TPO Detailing Membrane	24" x 50'	Proprietary	Un-reinforced flashing material manufactured from GAF TPO.
EverGuard Extreme® TPO Detailing Membrane	24" x 50'	Proprietary	Un-reinforced flashing material manufactured from GAF TPO designed for advanced protect against heat aging and UV degradation.
EverGuard® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO.
EverGuard Extreme® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded with GAF TPO compound to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.

Product	Dimensions	Test Specification	Product Description
EverGuard Extreme® TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded from GAF TPO designed for advanced protection against heat aging and UV degradation compounded to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
EverGuard® TPO RTA (Roof Transition Anchor) Strip™	6" x 100′ roll	Proprietary	Reinforced GAF TPO membrane with pressure sensitive adhesive primarily used to secure membrane transitions from the field to vertical surfaces.
EverGuard® TPO Split Pipe Boot	1”- 2” 3” - 5” 6” - 8”	Proprietary	Reinforced GAF TPO membrane split to accommodate most common pipes and conduits.
EverGuard Extreme® TPO Split Pipe Boot	1”- 2” 3” - 5” 6” - 8”	Proprietary	Reinforced GAF TPO designed for advanced protection against heat aging and UV degradation split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO with split design overlap to be wrapped around square or rectangular tubing.
EverGuard Extreme® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO designed for advanced protection against heat aging and UV degradation with split design overlap to be wrapped around square or rectangular tubing.
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO.
EverGuard Extreme® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Scupper	4” x 6” x 12” 8” x 10” x 12”	Proprietary	Scupper manufactured from coated metal and un-reinforced GAF TPO.
EverGuard® TPO T-Joint Cover Patch	100 patches per box	Proprietary	Patch manufactured from un-reinforced GAF TPO.
EverGuard Extreme® TPO T-Joint Cover Patch	100 patches per box	Proprietary	Patch manufactured from un-reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO Vent	2 vents per carton	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.
EverGuard® TPO Walkway Rolls	Rolls 1/8" x 30" x 50'	Proprietary	Standard duty walkway rolls.
EverGuard® TPO Inside Corner	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from un-reinforced GAF TPO.
EverGuard Extreme® TPO Inside Corner	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from un-reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Universal Corners	Various	Proprietary	Universal corners are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured of GAF TPO.
EverGuard Extreme® TPO Universal Corners	Various	Proprietary	Universal corners are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Vent Boot	1" - 6" o.d. 6 pcs. crtn.	Proprietary	Vent pipe boot molded from GAF TPO and supplied with stainless steel clamping rings.
EverGuard Extreme® TPO Vent Boot	1" - 6" o.d. 6 pcs. crtn.	Proprietary	Vent pipe boot molded from GAF TPO designed for advanced protection against heat aging and UV degradation and supplied with stainless steel clamping rings.
EverGuard® TPO Expansion Joint Cover	Various	Proprietary	Low profile joint cover manufactured from reinforced GAF TPO.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Clear solvent based sealant for TPO cut edges.
EverGuard® TPO Drain	Various	Proprietary	Spun aluminum drain pre-flashed with un-reinforced GAF TPO.
EverGuard® TPO Seam Cleaner	1 gallon	Proprietary	Solvent based seam cleaner.

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO Standing Seam Tape	6"	Proprietary	A white butyl tape.
EverGuard® TPO Batten Seam Profile	10’ length 1 ½” base 1 ¼” vertical rib	Proprietary	Accessory applied over GAF TPO roofing system to simulate a standing seam metal roof.
EverGuard® TPO Standing Seam Profile	10’ length 1 ½” base 1 ¼” vertical rib	Proprietary	Accessory applied over GAF TPO roofing systems to simulate a standing seam metal roof.
EverGuard® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO.
EverGuard Extreme® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
Topcoat® Membrane	1, 5 or 55 gallons	ASTM D6083	Acrylic, water based elastomeric membrane system designed to protect various types of roof surfaces.
Topcoat® TPO Red Primer	1 gallon	Proprietary	Tinted primer used on TPO to improve adhesion of Topcoat® coatings.
Matrix™ 307 Premium Asphalt Primer	3, 5, 55 gallons	ASTM D41	Asphalt concrete primer used to promote adhesion of all types of asphalt-based roofing materials.
LRF Adhesive M	1:1 applicator	Proprietary	A two-part elastomeric foamable adhesive.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
Structodek® High Density Fiberboard	High density fiber board	Blue Ridge Fiberboard, Inc.
Securock® Gypsum-Fiber Roof Board	Gypsum board	USG Corporation
DensDeck® Prime® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® DuraGuard® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ #14 Fastener	Truss head, self-drilling, pinch point, high thread fastener for use in steel, wood or concrete decks.	#14 x 16" max. length, #3 Phillips head	GAF
2.	Drill-Tec™ 3″ Standard Steel Plate	Galvalume® coated steel stress plate for use with approved Drill-Tec™ fasteners.	3" Round	GAF
3.	Drill-Tec™ 3” Ribbed Galvalume Plate (Flat)	Round Galvalume® plated steel stress plate with reinforcing ribs for use with Drill-Tec™ fasteners.	3" Round	GAF

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
UL LLC	UL 790	R10689	03/14/13
	UL 790	R1306	05/22/13
Factory Mutual Research Corp.	3020588	FM 4470	03/24/04
	3023458	FM 4470	07/18/06
	3041535	FM 4470	06/08/11
	3041769	FM 4470	05/26/11
	3042905	FM 4470	01/10/12
	3023458	FM 4450	07/18/06
	3046328	FM 4470	09/13/12
	3044862	FM 4470	05/11/12
	3044862	FM 4470	05/11/12
IRT-Arcon, Inc.	04-003	TAS 114	03/09/04
	04-021	TAS 114	05/13/04
	04-022	TAS 114	05/13/04
	04-023	TAS 114	05/13/04
	04-005	TAS 114	03/19/04
Exterior Research and Design, LLC	G4280LAB.10.06	TAS 114-D	10/20/06
	01881.11.03-2	TAS 114-D	11/26/03
Atlantic & Caribbean Roof	ACRC 07-016	TAS 114-D	04/19/07
Consulting, LLC	ACRC 07-005	TAS 114-D	01/17/07
	ACRC 07-017	TAS 114-D	04/19/07
	ACRC 07-024	TAS 114-D	05/01/07
	ACRC 07-049	TAS 114-D	09/13/07
	ACRC 07-048	TAS 114-D	03/19/04
	ACRC 11-004	TAS 114-D	03/21/11
PRI Construction Materials	GAF-426-02-01	ASTM D6878/TAS 131	01/27/14
Technologies, LLC	GAF-423-02-01	ASTM D6878/TAS 131	01/27/14
	GAF-501-02-01	ASTM D6878/TAS 131	01/27/14
	GAF-343-02-01	ASTM D1970	04/23/12
	GAF-344-02-01	ASTM D1970	04/23/12
	GAF-275-02-01	ASTM D1970	11/11/10
	GAF-435-02-08	TAS 114	01/29/14
	GAF-435-02-07	TAS 114	01/29/14
	GAF-065-02-01	ASTM D6083	07/08/05
	GAF-082-02-01	ASTM D6083	06/10/10
	GAF-369-02-01	ASTM D1622	10/22/12
	GAF-315-02-01	ASTM D2178	08/23/11
	GAF-314-02-01	ASTM D2178	08/23/11
	GAF-084-02-01	ASTM D6083	05/09/06
	GAF-499-02-01	ASTM D6083	03/12/14
	GAF-369-02-04	TAS 114	10/23/12
	GAF-511-02-02	TAS 114-J	04/08/14
Trinity | ERD	G121110.12.08	ASTM D4601	12/02/08
	G43180.01.14-1	ASTM D6163	01/10/14
	C8500SC.11.07	ASTM D6862/TAS 117	11/30/07
	G34140.04.11-4	ASTM D4601	04/25/11
Momentum Technologies Inc.	EX14A3A	ASTM D6083	02/26/04

APPROVED ASSEMBLIES

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type A(1): All layers of insulation are adhered with OlyBond® 500, OlyBond 500® Green, Olybond® Adhesive or hot asphalt to the deck. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the substrate in ¾" to 1" wide ribbons 6" o.c. of OlyBond 500®, OlyBond 500® Green or OlyBond® Adhesive at a rate of 1 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.
Or
All insulation shall be adhered to the substrate in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2. Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of vapor retarder. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to insulation with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to insulation and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -142.5 psf. (See General Limitation #9.)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type A(2): Optional anchor sheet fully adhered. One or more layers of insulation adhered with OlyBond® 500, OlyBond 500® Green, Olybond® Adhesive or hot asphalt. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

Anchor Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth, Ruberoid® Dual Smooth or Ruberoid® 20 adhered to substrate with approved mopping asphalt applied at a rate of 20-40 lbs./sq.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the substrate in ¾" to 1" wide ribbons 6" o.c. of OlyBond 500®, OlyBond 500® Green or OlyBond® Adhesive at a rate of 1 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Or

All insulation shall be adhered to the substrate in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2. Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.

Or

EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -102.5 psf. (See General Limitation #9.)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete

System Type A(3): One or more layers of insulation adhered with OlyBond 500® Green, Olybond® Adhesive or hot asphalt. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the substrate in ¾" to 1" wide ribbons 6" o.c. of OlyBond 500®, OlyBond 500® Green or OlyBond® Adhesive at a rate of 1 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.
Or
All insulation shall be adhered to the substrate in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2. Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -292.5 psf. (See General Limitation #7)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank.

System Type A(4): Insulation adhered with approved adhesive. Membrane is subsequently fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board Minimum 1/4" thick	**N/A**	**N/A**

Note: Insulation shall be adhered to the deck with OlyBond 500® or OlyBond 500® Green applied in continuous ¾" to 1" wide beads at a maximum spacing of 12" o.c. Insulation may be adhered in LRF Adhesive M applied in continuous ¾" to 1" wide ribbons at a maximum spacing of 12" o.c. when adhering directly to structural concrete (without optional vapor retarder). Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -230 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 3000 psi structural concrete.

System Type A(5): Insulation adhered with approved adhesive. Membrane is subsequently fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek® High Density Fiberboard, DensDeck® DuraGuard® Roof Board Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the substrate in ¾" to 1" wide ribbons and spaced 12" o.c. of OlyBond 500® or OlyBond 500® Green. Insulation may be adhered in LRF Adhesive M applied in continuous ¾" to 1" wide ribbons at a maximum spacing of 12" o.c. when adhering directly to structural concrete (without optional vapor retarder). Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -50 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type A(6): Membrane fully adhered to insulation which is adhered to a vapor barrier over a primed concrete deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered with asphalt at a rate of 25 lbs./sq. to the concrete deck previously primed with Matrix™307 Premium Asphalt Primer and allowed to dry prior to application of the vapor barrier.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard Polyiso Insulation, EnergyGuard RH Polyiso Insulation Minimum 1.5" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the vapor barrier in ¾" to 1" wide ribbons of OlyBond 500® or OlyBond 500® Green and spaced 6" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller**.**
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -125 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type A(7): Membrane adhered to adhered insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Note: Base layer of insulation shall be adhered with OlyBond 500®, OlyBond 500® Green applied in minimum 0.75 in. wide ribbons spaced maximum 12.0 in. o.c. Maximum insulation thickness 12.0 in. The base layer of insulation of multi-layer constructions may be either tapered or flat profiled. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

OR

LRF Adhesive M applied in minimum 0.75 in. wide ribbons spaced maximum 12.0 in. o.c. when adhered directly to the concrete deck (without optional vapor retarder). Maximum insulation thickness 12.0 in. The base layer of insulation of multi-layer constructions may be either tapered or flat profiled. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board		
Minimum 1/4″ thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with OlyBond 500®, OlyBond 500® Green or LRF Adhesive M applied in minimum 0.75 in. wide ribbons spaced maximum 12.0 in. o.c. and walked in. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6” side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3” side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding.

Surfacing: **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -232.5 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(8): Membrane adhered to adhered insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: UnderRoof™ 2 Polyester-Surfaced Leak Barrier self-adhered to deck primed with Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RH Tapered Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RN Tapered Polyiso Insulation		
Minimum 0.5" thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Tapered Polyiso Insulation		
Minimum 1.0" thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation,		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation shall be adhered to the substrate with OlyBond 500® or OlyBond 500® Green in 1" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(9): Membrane adhered to adhered insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: UnderRoof℠ 2 self-adhered to structural concrete deck primed with Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RN Tapered Polyiso Insulation Minimum 0.5" thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Tapered Polyiso Insulation Minimum 1.0" thick	**N/A**	**N/A**

Note: All Insulation layers shall be adhered with OlyBond 500® or OlyBond 500® Green in 1" ribbons spaced 12"o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board Minimum 0.25" thick	**N/A**	**N/A**

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -127.5 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type A(10): All layers of insulation are adhered. Subsequent layers are adhered to base layer of insulation. Membrane is subsequently adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ RA Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: All Insulation layers shall be adhered with OlyBond 500® or OlyBond 500® Green in 1" ribbons spaced 12"o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board Minimum 1/4″ thick	**N/A**	**N/A**

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -347.5 psf. (See General Limitation #9)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type B(1): Base layer of insulation mechanically attached. Any subsequent layers are then adhered to base layer of insulation. Membrane is subsequently adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 2" thick	**1, 2**	**1:2 ft²**

Note: Base layer of insulation shall be mechanically attached using the fastener density listed. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Apply optional top layer of insulation in ¾" to 1" wide beads 6" o.c. of OlyBond 500®, OlyBond 500® Green or OlyBond® Adhesive at a rate of 1 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3" side laps are sealed with a 1.5" wide heat weld for automatic machine welding. Weld width shall be a minimum 2" width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7.)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type B(2): Base layer of insulation mechanically attached. Any subsequent layers are then adhered to base layer of insulation. Membrane is subsequently adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.
OR
UnderRoof™ 2 Polyester-Surfaced Leak Barrier self-adhered to the concrete deck primed with Matrix™ 307 Premium Asphalt Primer.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation		
Minimum 2″ thick	**1, 2**	**1:6 ft²**

Note: Base layer of insulation shall be mechanically attached using the fastener density listed. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board		
Minimum 1/4″ thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered OlyBond 500® or OlyBond 500® Green applied in continuous 3/4″ wide beads at a maximum spacing of 12″ o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6” side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3” side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7.)

Membrane Type: TPO

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type C: Base layer of insulation is loose laid. Subsequent layer is mechanically attached through the base layer of insulation. Membrane is subsequently adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarder: (Optional) Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.
OR
UnderRoof™ 2 Polyester-Surfaced Leak Barrier self-adhered to the concrete deck primed with Matrix™ 307 Premium Asphalt Primer.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All layers of insulation shall be simultaneously fastened through the optional vapor barrier (when present) into the concrete deck; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board		
Minimum 1/4″ thick	**1, 3**	**1:1.45 ft²**

Membrane: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the substrate with a minimum 6” side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to the substrate and rolled with a weighted roller. The 3” side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding.

Surfacing: **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

CONCRETE SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
   (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
   (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE